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Some Remarks on Horses on the Ancient Silk Roads Depicted on Monuments of Art between Gandhara and the Tarim Basin (3rd–8th century)

Ulf JÄGER¹

Within the last few years it has become obvious to the author through his own studies, that the question of a certain "reality" in the depictions of horses in the arts between Gandhara and the Tarim Basin (Xinjiang), c. 3rd century and 8th century AD, has never really been explored.² The author would like to air the subject: Did the horses depicted really exist and of what breed were they? Have there ever been such horses? Or are they all pure fictional horses? In this very special case the author's intention is not to look at the equipment used in horse riding etc., but only for the zoological, i.e. biological, data and its depiction. Furthermore, is there a relationship between the depiction of horses and the actual horse breeding in life in ancient times along the Silk Roads between Gandhara and the Tarim Basin? Do the pictures of horses really reflect the various qualities of such ancient horses?

Such questions are not easy to answer and should be made a matter of discussion. In fact they occurred to the author many years ago when he read two important articles; one by A. von Gabain,³ the other by W. Eberhard.⁴ In her study A. von Gabain saw a certain conformity in style between images of horses in the art of the Buddhist cave-temples of Bamiyan (Afghanistan) and those on the Buddhist murals of the Tocharian state of Kucha on the northern route of the Silk Roads in the Tarim Basin. In both places horses were drawn with excessively fine legs, narrow bodies and heavily curved necks between the late 5th and early 7th centuries AD. A. von Gabain saw similarities with depictions of horses in early Tang paintings at Dunhuang (Gansu, PR China); and what she tried to introduce to the scholarly mind was whether or not the Kushans of Bamiyan were ethnic relatives of the Tocharians of Kucha. Not only did she try to prove this by horse-depictions but also by highlighting other cultural and linguistic similarities.

In contrast W. Eberhard proved the Chinese historical sources for many aspects of the cultural life of peoples along the Silk Roads. Among the information gathered from the Chinese sources is some which also included the role of the horse in these societies. Some other questions, but from a different aspect, i.e. arms and armour, which come to mind I have tried to work on in my archaeological dissertation.⁵

But other examples of horse depictions should be added when considering the economic quality of horses in the area and the span quoted above. Among the questions asked here are:

Was there a certain reality behind these depictions and which kind of importance did it have for the people? Can we be sure that certain 'types' of horses depicted in one location and in one time, but which are also depicted in the same time span but in another location show connections between peoples who bred them along the Silk Roads?

¹ Gronau-Epe / Westfalen.

² Ulf Jäger, *Reiter, Reiterkrieger und Reiternomaden zwischen Rheinland und Korea: Zur spätantiken Reitkultur zwischen Ost und West*, 4.-8. Jh. n. Chr. Ein Beitrag zur Synthese von Alter Geschichte und Archäologie, Beiträge zur Ur-, und Frühgeschichte Mitteleuropas 45, (Langenweissbach, 2006).

³ Annemarie von Gabain, "Von Kuca (Kusan) nach Bamiyan, eine kulturhistorische Studie", *Eucharisterion: Essays presented to Omeljan Pritsak on his 60th birthday by colleagues and students, Harvard Ukrainian Studies* 3-4 (1979-1980), pp. 258-270.

⁴ Wolfram Eberhard, "Die Kultur der alten zentral- und westasiatischen Völker nach chinesischen Quellen"; *Zeitschrift für Ethnologie* 73 (1941), pp. 215-275.

⁵ Jäger, *Reiter, Reiterkrieger und Reiternomaden zwischen Rheinland und Korea*.

Before some examples of art monuments can be discussed, it is important to state that such observations can only be made from material where horses are depicted in a most realistic way. Examples of art where the horses are too stylized cannot and will not concern us here. The period under discussion is Hellenism after Alexander the Great, which introduced great naturalism into the arts in Central Asia.

First of all we must ask the following question: Which kind of horses could perhaps be found in that part of Central Asia between the 2nd/3rd century AD and the 8th century AD? Before doing so, we have to look back a little deeper into prehistory: Until now we have accepted that in ancient times, and right up to the Middle Ages, large numbers of the 'Ur-Pferd',⁶ the ancestor of all known kinds of horses, the Przewalski horse, existed throughout the steppes of Eurasia (pl. 15).⁷ This wild horse of Asia, first discovered by the Russian explorer Mikhail Przevalskij in 1879 in Mongolia, has a large, long and ram-nosed head. Its short neck sits on steep shoulders; the mane stands upright. The body is compact and the withers are flat like the back. The back moves to the cruppers in a certain kind of cut-off. The short but robust legs end in relatively small but extremely hard hooves. The height of the Przewalski horse is ca. 1.30m. One can find a horse of these special qualities depicted very early in the 4th c. BC on a golden Scythian vase from Chertomlyk on the river Dnepr; the vase found its way to the Hermitage Collection in St. Petersburg. (pl. 16). The horses shown on the Chertomlyk vase are depicted in the very realistic Greek-Hellenistic style of the 4th c. BC. It should be mentioned that we can be sure that the Chertomlyk vase horses are of the Przewalski type because the Hellenistic artist styled them after their natural prototype. So there can be no doubt that the depiction on the Chertomlyk vase is the Przewalski horse.

Looking at the horses of Mongolia today, which are still ridden by Mongolian herdsmen, one realizes that these horses are not the same as the wild Przewalski horse. Other breeds of horses, maybe those of older Turkish origin, have changed the Mongolian horse.⁸ Very early in prehistory man had started to interbreed different kinds of horses for his own use – the biological bases was brought forward and first studied intensively by Charles Robert Darwin.⁹ Mankind had already been breeding horses for at least four millennia by the 2nd/3rd c. AD.¹⁰

The question to be answered in our context is what were the real needs for special horses along the Silk Roads and what were their special purposes? Without going into detail, one can detect two larger groups among horse-riders on the ancient Silk Roads between the 2nd/3rd c. and the 8th c. AD:

- a) Nomadic people
- b) Sedentary people

Nomads need their horses for mobility while herding their large flocks of sheep, goats, camels and horses. They have to go with them and change their flocks' pastures sometimes more than twice a year. Their transportable felt tents, yurts, were carried by Bactrian camels (*camelus bactrianus*). Nomads also need horses for hunting and for war. Being on horseback while in war they also try to enlarge their own herds of horses by conquering those of other tribes; large herds are a symbol of their wealth.

Among the group of people living in sedentary cultures there are more reasons for horse-riding. Among them are traders who need their horses for shorter or longer trade-travelling; there are wandering craftsmen and artists; hunters; diplomats on tour through the area they control or have to control and warriors on horseback. Besides that we find religious pilgrims on pious travels to sanctuaries and holy places. In our

⁶ Franz Hancar, "Das Pferd in prähistorischer und früher historischer Zeit", *Wiener Beiträge zur Kulturgeschichte und Linguistik* 11 (1956).

⁷ Sandor Bökönyi, *The Przevalsky Horse* (London, 1974).

⁸ Veronika Veit, "Das Pferd – Freund und Gefährte der Mongolen", in Walter Heissig und Claudius C. Müller (eds.), *Die Mongolen: Ausstellungskatalog München und Hildesheim 1989* (Innsbruck, 1989).

⁹ Charles Robert Darwin, *The origin of species by means of natural selection or the preservation of favoured races in the struggle for life* (London, 1859).

¹⁰ David W. Anthony, *The social and economic implication of the horse*, 2 parts (London, 1985, 1986); David W. Anthony, "The 'Kurgan-Culture': Indo-European origins and the domestication of the horse, a reconsideration", *Current Anthropology* 27 (1986), pp. 291-313; David W. Anthony, D.Y. Telegin and D.R. Brown, "Die Anfänge des Reitens", *Spektrum der Wissenschaft* 2 (1992), pp. 88-94; Marsha Levine, Colin Renfrew and Katie Boyle (eds.), *Prehistoric steppe adaptation and the horse* (Oxford, 2003).

context we will consider both groups of horse-riders. Both groups need different horses, but have one compulsory factor in common: they need horses of great endurance which are able to cope with thirst, hunger and the harsh climatic changes, yet also carry their owner and his heavy baggage. The question now is: Are there depictions of such horses in the arts between Bactria/Gandhara and the Tarim Basin which give us some indication of their use and qualities? But there is one more problem: bones of horses discovered from the area and the period of time in view of this article are not regularly examined by zoologists. Regarding material found during archaeological excavations, examinations like that have started only a few years ago in Germany and Western Europe; they are of great importance for our geographical sphere.¹¹

To start with the narrative Buddhist art of Gandhara, where we only find a limited number of horses depicted because of the stories told to the pious believer of antiquity, one finds a marvellous relief of 'Buddha riding out from his palace to visit the city' on his horse Kanthaka,¹² now stored in the Fitzwilliam Museum, Cambridge (No.O.4-1917) England. The relief is attributed to the 2nd/3rd century AD.¹³ D. Ahrens, working on Gandhara art, dates it AD 435.¹⁴ Whatever might be the right date for this Gandhara relief, we see the later Buddha, Prince Siddhartha, on Kanthaka in a frontal pose. With his strong legs, wide breast and the relatively small head, he gives us the impression of being of the robust type of horses ridden in Gandhara by the Kushans. It is obvious the horse could be of that small and robust sort which came to the area of Gandhara between modern Pakistan and Afghanistan, from where maybe the ancient relatives of the Kushans originally came, i.e. north-western China. Maybe these horses were still very close to the Przewalski type.

Back to the early time of the 1st/2nd century AD, the late pre-Kushan time,¹⁵ we see the wonderful golden clasp from Saksanokhur in Tajikistan with its nomadic rider, out boar-hunting with a lance (pl. 17).¹⁶ Only looking for the horse type, we find the upstanding mane, the strong legs and hooves, as well as the ram- or turnip-headed form of its head. This again brings us close to a breed still physically very near to the Przewalski horse of Central Asia. The observation that the Przewalski horse must have played a major role until the 1st to the 3rd/4th c. AD can also be seen at the so-called Yotkan ceramics, i.e. the little terracotta horse of this manufacture. Yotkan are the fine ceramics of Khotan on the south-western corner of the Silk Road in the Tarim Basin.¹⁷ All small terracotta from Khotan, i.e. the Yotkan horses, show the upstanding

¹¹ Manfred Rech (ed.), "Pferdeopfer, Reiterkrieger: Fahren und Reiten durch die Jahrtausende, Begleitpublikation zur gleichnamigen Ausstellung im Focke-Museum/Bremer Landesmuseum vom 5. 12. 2006 bis 25. 3. 2007", *Bremer Archäologische Blätter, Beiheft 4* (Bremen, 2006).

¹² Hans-Joachim Klimkeit, "Das Pferd Kanthaka: Symbol buddhistischer Erzähl- und Kunstelemente im zentralasiatischen Manichäismus"; Jürgen Ozols and Volker Thewalt (eds.), *Aus dem Osten des Alexanderreiches: Völker und Kulturen zwischen Orient und Okzident Iran, Afghanistan, Pakistan, Indien, Festschrift zum 65. Geburtstag von Klaus Fischer* (Köln, 1984), pp. 91-97; Klaus Fischer, "Zu erzählenden Gandhara-Reliefs: Mit einem Exkurs über den Hengst Kanthaka"; *Beiträge für Allgemeine und Vergleichende Archäologie des Deutschen Archäologischen Instituts* 2 (1980), Exkurs = pp. 277-294.

¹³ H. Ingholt and I. Lyons, *Gandhara Art from Pakistan* (New York, 1957), figs. 71, 196 and 200; A comparable Gandhara relief: Katsumi Tanabe, "Neither Mara nor Indra but Vaishnavana on Scenes of the Great Departure of Prince Siddhartha: The Origins of the Tobatsubishamonten Image", *Silk Road Art and Archaeology* 3 (1993-1994), pp. 157-185, see p. 183, figs. 8 and 9.

¹⁴ Dieter Ahrens, "Die Chronologie der Gandharakunst", *Pantheon* 19 (1961), pp. 114-118, see p. 118, fig. 7; Generally: Dieter Ahrens, "Die römischen Grundlagen der Gandharakunst", *Orbis Antiquus* 20 (1961).

¹⁵ Robert Göbl, "Münzprägung des Kusanreiches". Österreichische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Veröffentlichung der Numismatischen Kommission, Sonderband, (Wien, 1984); Robert Göbl, "Donum Burns. Die Kusanmünzen im Münzkabinett Bern und die Chronologie", (Wien, 1993); Robert Göbl, "The Rabatak Inscription and the date of Kanishka", in Michael Alram and Deborah E. Klimburg-Salter (eds.), *Coins, Art, and Chronology: Essays on the pre-Islamic History of the Indo-Iranian Borderlands*, Österreichische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Denkschriften 280, Beiträge zur Kultur- und Geistesgeschichte Asiens Nr. 31, Veröffentlichungen der Numismatischen Kommission Band 33, (Wien, 1999), pp. 151-175.

¹⁶ Judith Rickenbach, *Oxus. 2000 Jahre Kunst am Oxus-Fluss in Mittelasien: Neue Funde aus der Sowjetrepublik Tadschikistan, Eine Ausstellung in Zusammenarbeit mit der Akademie der Wissenschaften von Tadschikistan/UdSSR und der Ermitage in Leningrad* (Zürich, 1989), pp. 52-53, no. 25, fig. 25.

¹⁷ Gerd Gropp, *Archäologische Funde aus Khotan, Chinesisch-Ostturkestan: Die Trinkler-Sammlung im Übersee-Museum Bremen, Wissenschaftliche Ergebnisse der Deutschen Zentralasien-Expedition 1927/28, Teil 3, Monographien der Wittheit zu Bremen* 11 (Bremen, 1974), pp. 304 and 328-330: f. 2. 80.-83.

mane and the rams-head of the Przewalski horses, here shown in six examples from the Pietrovsky collection in the Hermitage, St. Petersburg, Russia (pl. 18).¹⁸ Slightly different, but still with the upstanding mane, we find two depictions of horses (and their riders) on two wooden panels from Dandan-Oilik oasis in Khotan (panel D. X. 5 and panel D. VII. 5),¹⁹ both are now at the British Museum, London. They belong to a time between the 5th/6th century AD (pl. 19). The very difference we can recognize for the first time is that both depicted horses are piebalds. Such a skin colour the Przewalski horses never have – they are always of a yellowish skin colour! This may be an influence of early Turkish breeding,²⁰ which might have changed the Khotan horses at the latest in the 4th to 6th centuries AD by horse imports. Such changes in colour only happen when horse breeders again and again select animals out for breeding new skin colours. At Khotan we have to reckon with the fact that the Hephtalites were responsible for these new horse breeds.²¹ Here we will not go into whether or not the Hephtalites were of Turkish or Iranian origin.²² Before we continue to see if and when horse breeds in pre-Islamic Central Asia changed, one should add that there was also another wild horse living on the steppes from Eastern Europe to Central Asia called Tarpan (*equus ferus gmelini*). This wild horse had died out by the beginning of the 19th century.

It has been a question among zoologists until today, if the Tarpan was a completely separate wild horse or if it was only a variant type of the Przewalski horse. The skin colour of its body was mouse-dun or darkish grey; the legs as well as the face were darker grey. Whereas the Przewalski horse was unwilling to be mounted, the Tarpan was more accommodating. This could be an indication that the Tarpan, looking so close to the Przewalski horse, is an early breed of the Przewalski horse! All Tarpans living in modern zoos today are descendants of those Tarpans which were completely re-bred in the early 1930s in the zoo Hellabrunn (Munich). It is difficult to decide whether we should speak of two wild horses on the Eurasian steppes or of one original stock; i.e. the Przewalski horse. It was M. Hermanns who tried to distinguish certain types of wild horses to explain the types of horses bred in Tibet, but from the point of view held today in modern scholarship one at least has to be careful about his results.²³ When looking for the horses of the Huns who had arrived in Eastern Europe by 375 AD, we see that their horses must have been very close to the Przewalski horse again, as O. Maenchen-Helfen analysed from late Roman sources.²⁴ In fact the German sculptor Erich Hösel (1869–1953) made his 'Hun bending down from his horse' in bronze of 1900 (pl. 20) following these late Roman sources.

The osteological material of the Hunic horses has been so badly examined that it did not even play any role in the great and admirable study on the Hunic material by Bodo Anke a few years ago.²⁵

While continuing the history of horse-breeding in Central Asia during the period in question, we have to remember also the so-called 'blood-sweating horses' of Ferghana in eastern Sogdiana, which brought the

¹⁸ Natalya W. Dyakonova and S. S. Sorokin, *Chotanskije Drevnosti: Katalog Terakota I Shtuk* (Leningrad, 1960), pl. 34, nos. 1466, 1467, 1469, 1489, 1488 and 1468.

¹⁹ Marc Aurel Stein, *Ancient Khotan*, 2 vols. (Oxford 1907), vol. 2, pl. LXII and pl. LIX. Markus Mode, "Sogdian Gods in Exile—Some iconographic evidence from Khotan in the light of recently excavated material from Sogdiana", *Silk Road Art and Archaeology* 2 (1991–1992), pp. 179–214, p. 211, a and c.

²⁰ Emel Esin, "The Horse in Turkic Art", *Central Asiatic Journal* 10.3–4 (1965), pp. 167–227, see pp. 201–218: "The Horse Species in Turkic Art".

²¹ Gerd Gropp, *Archäologische Funde aus Khotan, Chinesisch-Ostturkestan*, pp. 34–35.

²² Albert Hermann, "Die Hephtaliten und ihre Beziehungen zu China", *Asia Major* 2 (1925), pp. 564–580; Roman Ghirshman, *Les Chionites-Hephtalites*, *Memoires de la Delegation Archeologique Francaise en Afghanistan* 13 (Cairo, 1948); Robert Göbl, *Dokumente zur Geschichte der iranischen Hunnen in Baktrien und Indien*, 4 vols. (Wiesbaden, 1969); D. W. Mac Dowall and Maurizio Taddei, "The Hephtalites", in F.R. Allchin, N. Hammond, *The Archaeology of Afghanistan from earliest times to the Timurids* (London, New York, San Francisco, 1978), p. 234; Jangar Ya. Il'yasov, "The Hephtalite Terracotta", *Silk Road Art and Archaeology* 7 (2001), pp. 187–200, see p. 187.

²³ Matthias Hermanns, *Die Nomaden von Tibet. Die sozial-wirtschaftlichen Grundlagen der Hirtenkulturen in A Mdo und von Innerasien, Ursprung und Entwicklung der Viehzucht* (Wien, 1949), pp. 161–169.

²⁴ Otto J. Maenchen-Helfen, *Die Welt der Hunnen: Eine Analyse ihrer historischen Dimension* (Wien, Köln, Graz, 1978), pp. 156–159.

²⁵ Bodo Anke, *Studien zur reiternomadischen Kultur des 4. bis 5. Jahrhunderts*, Beiträge zur Ur- und Frühgeschichtliche Mitteleuropas 8, 2 vols. (Langenweissbach 1998).

Han-emperor Wu Di 武帝 (140–87 BC) to the very point of sending out his envoy Zhang Qian 張騫 in 138 BC to forge an alliance against the Xiongnu 匈奴 with the Yuezhi 月氏, a tour which took him 12 years and a journey of more than 3000 kilometres up to modern Afghanistan.²⁶ These horses were called 'blood-sweating' because, as we know today, a parasite (*parafiliaria multipupillosa*) infests the horse during its lifetime. A small amount of the horse's blood mixes with the sweat to form a foam of pinkish colour. In all likelihood the well known bronze-horse of Wuwei 武威 in the province of Gansu, PR China²⁷ (pl. 21) of the eastern Han Dynasty; 2nd c. AD, meant exactly such a 'blood sweating' horse of the Yuezhi nomads who had conquered Bactria. If one looks for the race of this horse of Wuwei, which found such an extraordinary interest in China and abroad, one has to establish that horse-breeding always was of paramount importance for the Chinese so that they were able to defend themselves against nomadic invaders from the north. But, as a matter of fact, the Chinese never really became familiar with horses. They always used foreign, mainly nomadic grooms to breed horses, as we can see when taking a closer look at for example the famous Tang horses, which are often shown together with their non-Chinese grooms.²⁸ Regarding their own horse-breeding, the Chinese horses were again not too far away from the Przewalski type.

In contrast to all horses mentioned up to now and for the question of how horses were later on bred in Central Asia before Islam, we have to look to the western part of this vast geographical area. After Alexander the Great had conquered the Persian Achaemenian Empire (334 BC), he also used large numbers of horses in his army. But the Greeks' horses weren't much larger than the Przewalski horses.²⁹ Even Alexander's Thessaly horse Bucephalus (the 'bull-headed') cannot have been much larger. We see him riding on Bucephalus on the well known mosaic from Pompeii during the battle of Issos in 333 BC against Darius III (pl. 22),³⁰ now in the National Museum of Naples, Italy.

We can be sure that Alexander's horse specialists were always looking for fresh horses on their march to the East. Again and in all likelihood the Greeks and Macedonians could not rely on a supply of fresh horses from their homeland, so in addition they must have used breeds of horses they found all over Iran. At the present time we have no clear picture of the Achaemenian horses which were used not only for war-chariots but also for riding. We know that Darius III allowed himself to be depicted as a keen rider (Herodotus III, 8, 3) and came to power with the help of his groom, Oibares. The problem has been discussed widely by Dieter Metzler.³¹ With the Parthians and later during the time of the Sasanians, the Iranian kings are depicted on their marvellous horses on their rock reliefs. In contrast to all images of horses shown up until then, these horses are obviously thoroughbreds; they all have long and strong legs, and expressively formed cruppers. It is an open question if the Sasanians bred these magnificent horses themselves or with the help of neighbouring nomads from the North and from the East of their territories. To breed such larger war-horses must have required quite a long period of experience (pl. 23).³² As could be seen on the rock-relief of Naqsh-e Rostam in Iran,³³ which illustrates the investiture of Ardashir I in 224 AD by Ohrmazd, these horses were of a compact and heavy structure. So at the latest during the beginning of the 3rd century AD, such horses

²⁶ Bill Cooke, "The Horse in Chinese History", in Bill Cooke (ed.), *Imperial China: The Art of the Horse in Chinese History, Catalogue of the Exhibition at the Kentucky Horse Park Museum* (Lexington (Kentucky), 2000), p. 27-62, see pp. 41-44.

²⁷ William Watson (ed.), *The Genius of China: An Exhibition of archaeological finds of the People's Republic of China held at the Royal Academy* (London 1973), p. 119-120, no. 222.

²⁸ Jane Gaston Mahler, *The Westerners among the figurines of the T'ang-Dynasty in China*, Instituto per il Medio ed Estremo Oriente, Serie Orientale 20 (Rome 1959); P. Eichenbaum-Karetzky, "Foreigners in T'ang and pre T'ang Painting", *Oriental Art*, New Series 30.2 (1984), pp. 160-166; J. Hildebrandt, *Das Ausländerbild in der Kunst Chinas als Spiegel kultureller Beziehungen (Han bis Tang)*, Münchner Ostasiatische Studien 46 (Wiesbaden, Stuttgart, 1987); Ezekiel Schloss, *Foreigners in Ancient Chinese Art* (New York 1969); Ezekiel Schloss, *Ancient Chinese Ceramic Sculpture from Han to Tang*, 2 vols. (Stanford, 1977).

²⁹ Victor Davies Hanson, *Der Krieg in der griechischen Antike* (Leipzig 2001), pp. 158-160.

³⁰ Klaus Stähler, *Das Alexandermosaik: Über Machterreichung und Machtverlust* (Frankfurt/Main 1999).

³¹ Dieter Metzler, *Ziele und Formen königlicher Innenpolitik im vorislamischen Iran*, (Unpublished 'Habilitationsschrift', Münster, 1977), pp. 148-154.

³² Roman Ghirshman, *Iran: Parther und Sasaniden* (Munich, 1962), pp. 127-132, 152, fig. 195, p. 161, fig. 205, pp. 167-168, p. 179, fig. 220, p. 192, fig. 235, p. 207, fig. 247, p. 208, fig. 250, p. 212, fig. 254, p. 220, fig. 262, p. 242, fig. 295, p. 249, fig. 314, p. 263, fig. 339.

³³ Ghirshman, *Iran: Parther und Sasaniden*, p. 132, fig. 168 (here fig. 12).

must have been the standard for the Sasanians' war-horse. It is difficult to come to any conclusion about what the Parthian horses looked like in the four centuries before the Sasanians came to power. Maybe a relief, now in the Cleveland Museum of Art, Ohio, originally from Dura Europos in Syria, of ca. 100–150 AD gives us a little help at hand (pl. 24). But once again we see that this horse too is of a heavier structure.³⁴ Searching for realistic depictions of horses in the Iranian world before the Sasanians is, as we have tried to show, extremely difficult. We can only assume that horse-breeding in the Iranian world between Alexander the Great and the end of the Parthian era increased widely, so that such heavy horses like the 'Sasanian ones' could be raised. To raise horses different from the Przewalski type became necessary because of a change in the tactical use of horses for war in general. The Parthians, who constantly maintained contacts in the world of the Central Asian steppes throughout their reign,³⁵ were responsible for this new breed. Since the late Hellenistic times of the Parthians, horses were needed for the heavy Cataphractarian riders; such a use would have been impossible with small horses of the Tarpan or Przewalski types.³⁶ Besides these heavy types of horses another much lighter one was bred, i.e. that for the warrior on horseback who only used the reflex-bow,³⁷ but which was also used for hunting.

On the other hand we learn from the fantastic depiction of riding warriors from the bone-clasp or 'Battle plaque' from Orlat, Kurgan Tepe near Samarkand in Uzbekistan of the 3rd to the first quarter of the 4th century AD (pl. 25), that another type of war-horse was also in use during the earliest phase of the Middle Ages in pre Islamic Central Asia.³⁸ As far as we know, the date of the plates from Orlat is most likely the 3rd/4th c. AD, even if others have dated them slightly earlier.³⁹ As stated above, M. Mode argues for a date in the 3rd/4th century AD for the Orlat plates, i.e. for a date within the phase of the 'Hunnish wave', as did his scholarly teacher B. Brentjes in 1990⁴⁰ with good arguments because of the history of arms and armour depicted from the battle-plaque of Orlat. If one more or less accepts that the Orlat plates should be dated to the 3rd/4th century, it is once more interesting to wonder in which "older Scythian" style the horses are pictured.

On the one hand the cruppers of the Orlat horses are depicted like those on the well known carpet from Kurgan no. 5 of Pazyryk of the 4th century BC, showing a rider on horseback in front of a seated female person or deity.⁴¹ But if one looks at the neck and head of the Orlat horses one is reminded of the fine horses on a Buddhist painting in the "Malerhöhle" at Kyzil, Northern Silk Road in the Tarim Basin, once dated by the excavator A. von LeCoq to the 6th/7th century AD.⁴² (pl. 26) One might be confused by such comparisons which are hundreds of years apart from each other. But one could answer that we find here insightful traces for the development of horse-breeding among nomads and their sedentary neighbours of Central Asia in a time-span between the 4th century BC and the 6th/7th centuries AD! Maybe this also throws some light on the trade with horses and the individual breeding of horses at different places along the Silk Roads. We will come back to this elementary question later on.

³⁴ Malcolm A.R. Colledge, *Parthian Art* (London 1977), plate 22.

³⁵ Marek Jan Olbrycht, *Parthia et ulteriores gentes. Die politischen Beziehungen zwischen dem arsakidischen Iran und den Nomaden der eurasischen Steppen* (Munich, 1998).

³⁶ Jäger, *Reiter, Reiterkrieger und Reiternomaden zwischen Rheinland und Korea*, pp. 89–101.

³⁷ Jäger, *Reiter, Reiterkrieger und Reiternomaden zwischen Rheinland und Korea*, pp. 15–21.

³⁸ Markus Mode, "Heroic fights and dying horses: The Orlat battle plaque and the roots of Sogdian art", in M. Compareti, P. Raffetta and G. Scarcia (eds.) *Eran ud Aneran. Studies Presented to Boris I. Marshak in Occasion of His 70th Birthday* (Venice, 2006), pp. 419–454.

³⁹ Boris I. Marshak, "Iskusstvo Sogda", B. B. Piotrovskiy, G. M. Bongard-Levin (eds.), *Central'naya Aziya: Novyye pamyatniki pis'mennosti i iskusstva. Sbornik statey* (Moscow, 1987), pp. 233–248; Mikhail V. Gorelik, "Zashchitnoe vooruzhenie stepnoy zoni Evrazii i primikayushchikh k ney territoriy v I tis". In V. E. Medvedev, Yu. S. Khudyakov (eds.), *Voennoye delo naseleniya yuga Sibiri i Dal'nego Vostoka* (Novosibirsk, 1993), pp. 149–179; Jangar Ya. Ilyasov, Dimitry V. Rusanov, "A study on the bone plates from Orlat", *Silk Road Art and Archaeology* 5 (1997–1998), pp. 107–159; Boris A. Litvinsky, "The Bactrian ivory plate with a hunting scene from the Temple of the Oxus", *Silk Road Art and Archaeology* 7 (2001), pp. 137–166.

⁴⁰ Burchard Brentjes, "Zu den Reiterbildern von Kurgan-Tepe", *Iranica Antiqua* 25 (1990), pp. 173–182.

⁴¹ Karl Jettmar, *Die frühen Steppenvölker, Der eurasiatische Tierstil, Entstehung und sozialer Hintergrund* (Baden-Baden, 1965), pp. 115, 117.

⁴² Albert von LeCoq, *Bilderatlas zur Kunst und Kulturgeschichte Mittel-Asiens* (rpt. Graz 1977), p. 54, fig. 50.

That a more or less radical change in breeding horses had taken place at latest during the early middle ages of Central Asia, between the 5th-7th century AD, can also be detected when having a closer look at the fine rock carvings of two horses at Thalpan Bridge on the upper Indus of Northern Pakistan⁴³ (pl. 27). These horses can very well be compared with images of horses from the wall paintings of Sogdiana of the 6th/7th century AD, for example from Panjikent.⁴⁴ At Panjikent we find horses which for sure can be called thoroughbreds. The Thalpan Bridge horses obviously show the same thoroughbreds, but looking at their heads we can detect that they are still a little ram-nosed like on earlier depictions which showed us horses nearer to the Przewalski type. When examining the horses of the Buddhist wall painting at Kyzil from the "Malerhöhle" (pl. 26) and comparing these horses with two terracotta horse statuettes from Shurtshuk (pl. 28) on the northern Silk Road, found by M. A. Stein⁴⁵ (dated at the latest to the 8th century AD), we see that well established thoroughbreds are meant. But again a slight influence of the Przewalski horse remains, i.e. the upright mane. However, on the well known wall painting from the Uighur city of Qocho, now in the Turfan-Collection of the Museum of Asiatic Art of Berlin (the 8th/9th century AD), depicting the departure of Siddhartha on his horse Kanthaka (pl. 29), we note that the horse has lost the upright mane.⁴⁶

Horse-breeding in China reached its peak during the Tang dynasty (618–906 AD). As mentioned above it was always in the hands of foreigners from the western part of Central Asia. One of the finest ceramic horses in the *sancai* 三彩 technique of the Tang dynasty (dating 723 AD, pl. 30)⁴⁷ shows the full development to thoroughbreds in China under Central Asian influence. It must be stated again that this kind of fine horse-breeding was only possible with the help of Central Asian foreigners; either of nomadic or of sedentary heritage and stock. Riding on such marvellous horses for hunting, playing Polo, going to war was a privilege only for the early medieval aristocracy of China. As far as we know, the development or breeding of the Tang horse was accomplished without any input from horses of Arabian descent.⁴⁸

SUMMARY

Horse-breeding started with the Przewalski horse, the wild horse of Eurasia. According to all technical literature on horse-breeding, the Przewalski horse was never tamed and consequently never ridden. Maybe the Tarpan, still existent in Eastern Europe until the very early 19th century, with physical outlook very close to the Przewalski horse, was the earliest breed of horse and the one from which all further horse-breeding started. Some Tarpan did not have an upright mane, but one which hung down to its neck. Incidentally, this was also the case with the horses belonging to the Huns which arrived in Eastern Europe in the late 4th century AD according to Flavius Vegetius Renatus.⁴⁹ The nomads of Central Asia bred horses for their very special purposes – fit for riding while herding their flocks, for hunting and of course for warfare. Very often forgotten, nomads also played an important role in the trade along the Silk Roads in pre-Islamic and Islamic times.⁵⁰ The horses had to be persistent runners and must have had the ability to cope with all climatic changes and hardships of heat and extreme cold, as well as being able to endure long rides.

Our 17 illustrations and those quoted in the footnotes could only illustrate the likely development of horse-breeding between Bactria/Gandhara and the Tarim Basin between the 2nd/3rd century and the 8th/9th century AD. No complete picture has been shown here! There is a certain tendency in the history of horse-breeding to go for larger horses, not only for aesthetic reasons, but also because heavier animals could, for

⁴³ Volker Thewalt, "Pferdedarstellungen in Felszeichnungen am oberen Indus", in J. Ozols and V. Thewalt (eds.), *Aus dem Osten des Alexanderreiches*, pp. 204–218, see p. 210, fig. 7 and p. 211, fig. 8.

⁴⁴ Alexandr Belenitzkij, *Mittelasien: Kunst der Sogden* (Leipzig, 1980), pp. 64, 67.

⁴⁵ Marc Aurel Stein, *Serindia*, 5 vols, (Oxford 1921), IV, plate CXXXVI.

⁴⁶ Benjamin Rowland jr, *Zentralasien* (Baden-Baden, 1970), p. 194 (Tang-sculptural ceramic comparison on p. 195, fig. 74).

⁴⁷ Helmut Brinker and Roger Goepper (eds.), *Kunstschätze aus China. 5000 v.Chr bis 900 n.Chr. Neuere Funde aus der Volksrepublik China* (Zürich, 1980), p. 311, no. 80, p. 312, fig. 80.

⁴⁸ Alexis von Wrangel, *Der Araber in Arabien: Die edelste Pferderasse der Welt* (Heidenheim, 1966).

⁴⁹ Flavius Vegetius Renatus, *Digestorum artis mulomedicinae libri quatuor*, H. P. Lommatsch (ed.) (Leipzig 1903).

⁵⁰ Hans-Wilhelm Haussig, *Die Geschichte Zentralasiens und der Seidenstrasse in vorislamischer Zeit*, (Darmstadt, 1992, 2nd ed.); Marek Jan Olbrycht, "Der Fernhandel in Ostarmatien und in den benachbarten Gebieten", *Laverna* 12 (2001), pp. 86–122.

example, carry warriors with heavy armour. Also in time different colours, like completely white or black ones etc. came to be bred. This is reflected by the names of horses in Central Asia too.⁵¹

Besides the transport-animal of the Silk Road 'par excellence', the two-humped Bactrian camel⁵² (*camelus bactrianus*), in German unfriendly enough to be called 'Trampeltier', the horse played the most important role for the whole development of cultural interrelations in nearly all aspects of life.

Without horses men and ideas, as well as technologies and political changes, be it in peace or through war, would never have been possible on the Silk Roads between Gandhara and China. Horses have played a major role throughout history and were always the important vehicle, not only for the transportation of men, but also for his ideas and his ideals, as well as for religions, like Buddhism. With good reason we call the Silk Roads by this very name, but we could equally well call them the 'Horse Roads'. It is a pity that we do not have much more precise information about prices for horses in the different trading-places along the Silk Roads; the sources are silent about it. The Chinese sources between the Han and Tang dynasties again and again speak of fine horses bred by nomadic and sedentary peoples in Central Asia⁵³ and obviously some of these people tried to keep to themselves their knowledge about horse-breeding. Thus we hear that the Hephtalites bred a god-like horse in a cave which fertilized their mares.⁵⁴ With this background it is no wonder that the Chinese were always looking for grooms from such peoples who managed to furnish them with the finest horses. Much more archaeological research and many more investigations on an international scale are needed to be able to map out the full picture of horse-breeding all over Eurasia, but especially in the vast regions of Central Asia. These few lines are meant as a careful attempt for future discussions and cooperation.

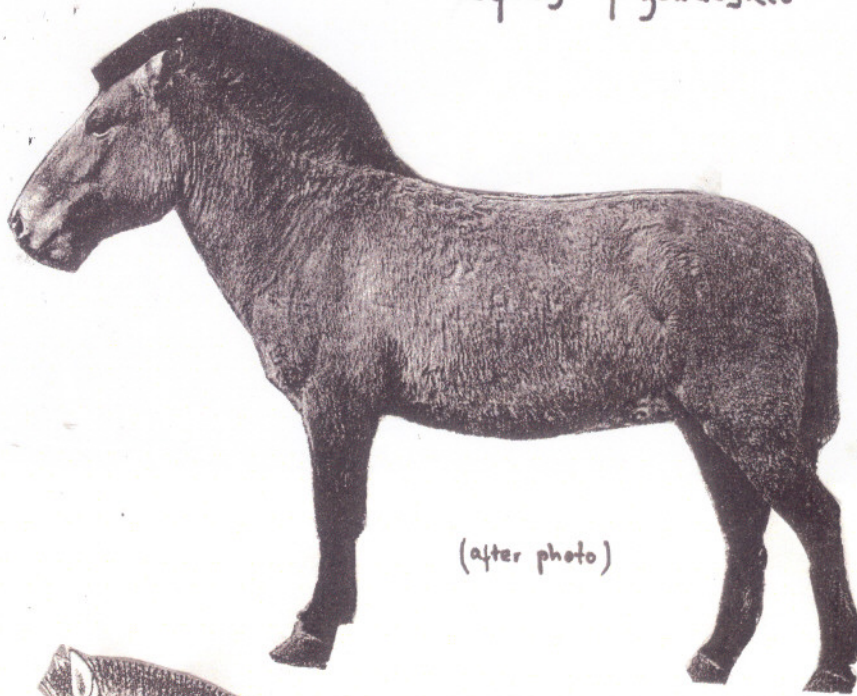
⁵¹ Nikolaus Poppe, "Pferdenamen in der Geschichte und Sage der Nomaden Zentralasiens", *Oriens Extremus* 9 (1962), pp. 97-104.

⁵² Elfriede Regina Knauer, "The camel's load in life and death: Iconography and Ideology of Chinese Pottery Figurines from Han to Tang and their relevance to trade along the Silk Routes", *Acanthus Crescens* 4 (Zürich, 1998).

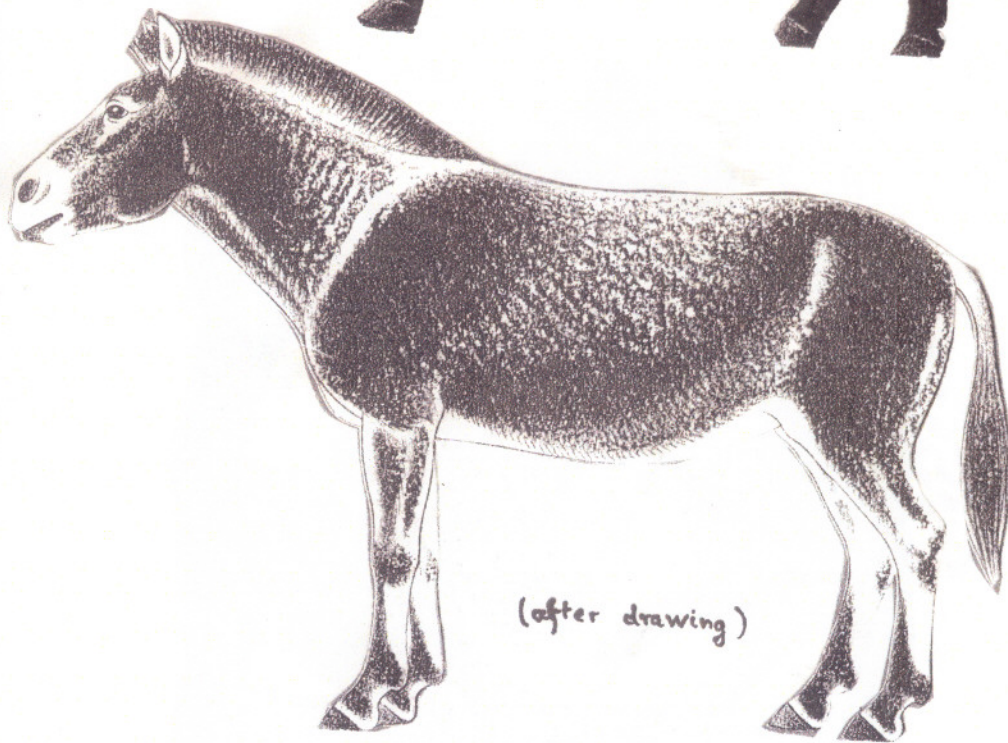
⁵³ Wolfram Eberhard, "Die Kultur der alten zentral- und westasiatischen Völker nach chinesischen Quellen", *Zeitschrift für Ethnologie* 73 (1941), pp. 215-275, see: Teil 4 "Spezialfragen §1: Tabellarische vergleichende Übersicht der behandelten Kulturen", pp. 264-266.

⁵⁴ Wolfram Eberhard, "Die Kultur der alten zentral- und westasiatischen Völker"; p. 257.

Equus przewalskii

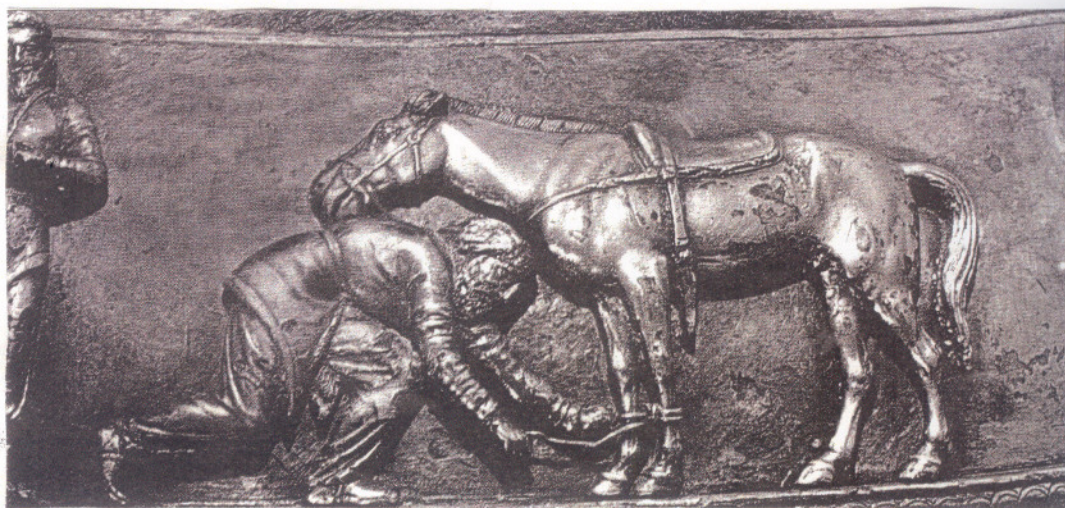


(after photo)



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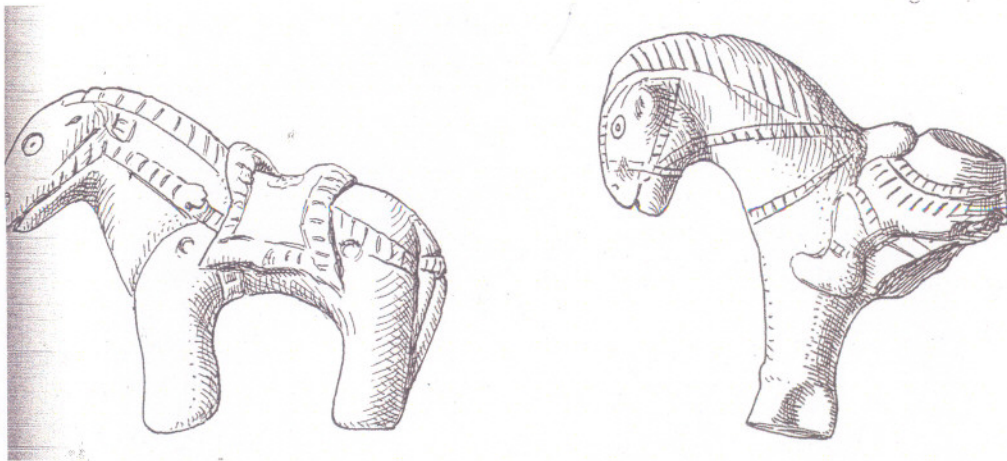
Pl. 15 Przewalski horse



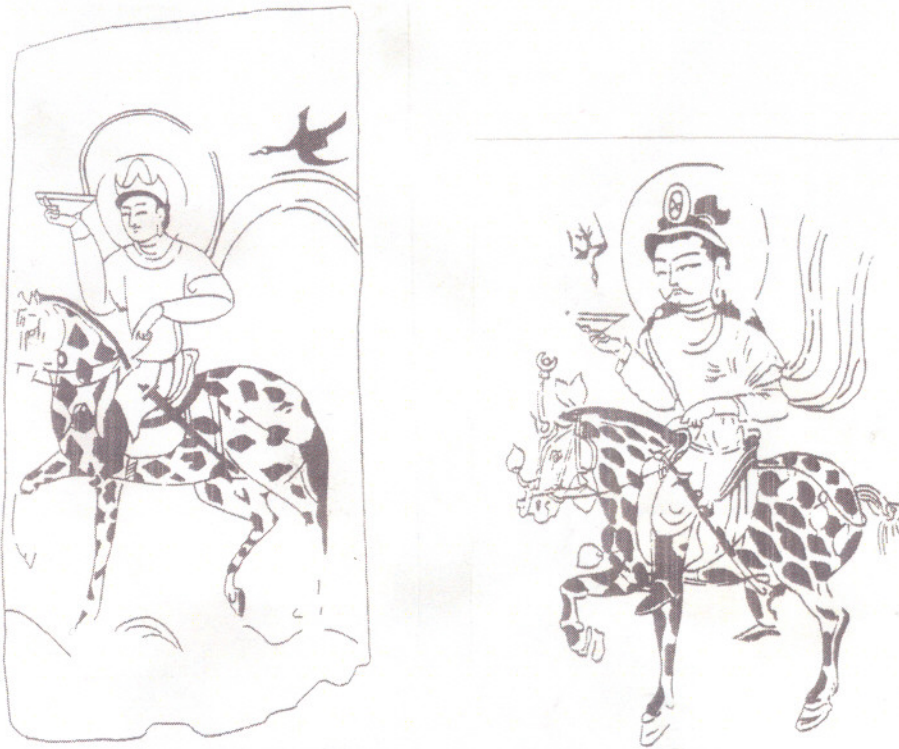
Pl. 16 Certomlyk vase



Pl. 17 Golden buckle, Saksanokhur



Pl. 18 Terracotta-horses from Khotan



Pl. 19 Horses and their riders from Dandan-Olik, Oasis of Khotan



Pl.20 Statue of a 'Hunnic rider'



Pl. 21 Horse from Wuwei



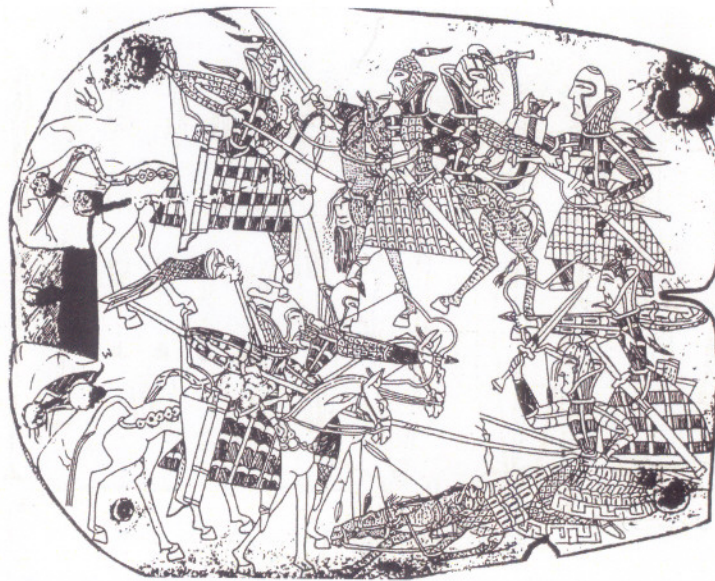
Pl. 22 Alexander the Great on his horse Bucephalos



Pl. 23 Naqsh-i Rustam



Pl. 24 Parthian relief of a horse and its rider from west or central Syria



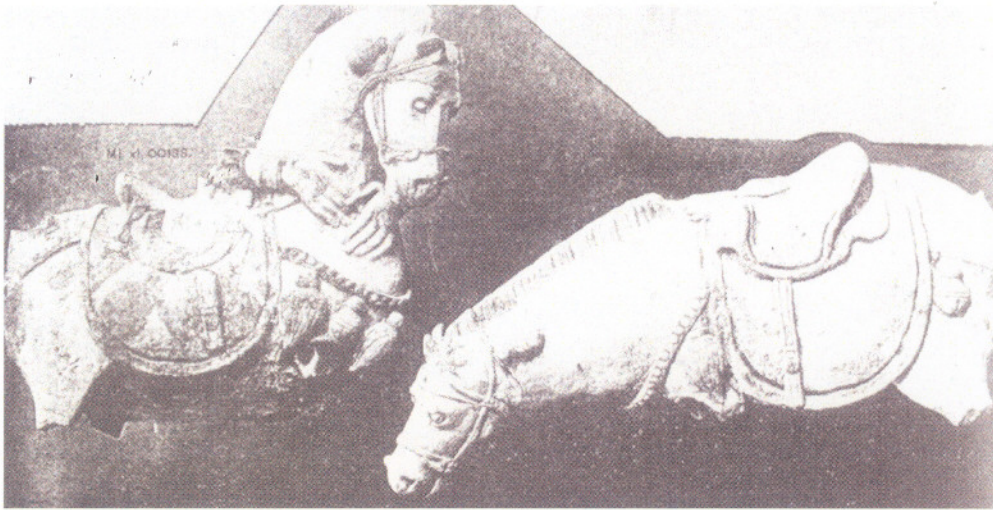
Pl. 25 'Battle-plaque' from Orlat near Samarkand



Pl. 26 Buddhist painting in the 'Cave of the painters' at Kyzil



Pl. 27 Horse depicted on rocks at Thalpan, northern Pakistan



Pl. 28 Terracotta-horses from Shortshuk



Pl. 29 'The great departure' of Prince Siddhartha
(Qoco near Turfan)



Pl. 30 Terracotta saddled horse (Tang dynasty)